



## ELECTRONIC MESSAGING REGISTRATION

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This manual implements Air Force Instruction (AFI) 33-127, *Electronic Messaging Registration and Authority*. It establishes procedures and defines the acceptable formats for registration of each messaging object. Refer technical questions on the content of this manual to the Air Force Registration Authority (AF RA), Headquarters Standard Systems Group (HQ SSG/SINR), 201 East Moore Drive, Maxwell AFB-Gunter Annex AL 36114-6343 or electronic mail (e-mail) to "register@ddn.af.mil." Refer recommended changes and conflicts between this and other publications to Headquarters Air Force Communications Agency (HQ AFCA/XPPD), 203 West Losey Street, Room 1065, Scott AFB IL 62225-5224, using AF Form 847, **Recommendation for Change**. Major commands (MAJCOM), field operating agencies (FOA), and direct reporting units (DRU) send one copy of their supplement to HQ AFCA/XPPD. See attachment 1 for a glossary of references, abbreviations, acronyms, and terms.

### SUMMARY OF REVISIONS

This is the initial publication of Air Force Manual (AFMAN) 33-128. It establishes the procedures that implement the Air Force electronic messaging registration process described in AFI 33-127.

#### 1. Introduction.

- 1.1. Electronic messaging systems and their operation are critical to the Air Force mission and must interoperate with other services/agencies (s/a), allies, and civilian messaging systems.
- 1.2. Department of Defense (DoD) mandates the use of international standards to perform electronic messaging and directory services. The DoD, in using international standards, requires the registration of objects that are clearly identifiable on a global basis. There are two types of objects that require registering: messaging and component. Thus, the Air Force messaging systems must maintain global uniqueness of messaging objects (for example, names, addresses, security information, and routing information) to interoperate with other s/a, allies, and civilian messaging systems. The registration process establishes the procedures to collect and manage the data necessary to ensure global uniqueness. This manual provides the guidance needed to implement the Air Force electronic messaging registration process.

#### 2. Background.

- 2.1. The Defense Information Systems Agency (DISA), Network Information Center (NIC), is responsible for DoD electronic messaging registration. DISA, with the support of the s/a representatives, established registration procedures for objects that require registration with DISA. These procedures are the baseline for registration of objects required by DISA: originator/recipient (O/R) address, distinguished name (DN), directory service agent (DSA) component names, message transfer agent (MTA) component names.
- 2.2. Registration of objects with DISA is the responsibility of the AF RA. The sub-registration authority (SRA) will register unique Air Force component and messaging objects with the AF RA. Registration of component and messaging objects will provide the AF RA the information necessary to manage transition of existing messaging systems to future Air Force messaging systems, as well as accommodate the DISA information reporting requirements. The AF RA will forward

registration requests to DISA using the NIC electronic messaging registration procedures. See attachment 5 for guidance and procedures to the SRA that will implement and maintain the X.400 message handling system (MHS).

2.3. Registration of Air Force component and messaging objects is the responsibility of the SRA. The SRA will forward registration requests to the AF RA using the procedures contained in this manual.

### **3. Defense Message System (DMS) Registration.**

3.1. This manual defines procedures for registering and maintaining Air Force messaging and component objects. Electronic messaging is comprised of DSAs, O/R addresses, and MTAs, as described below:

3.1.1. Directory System: The directory system comprises all objects that make up the X.500 standard. This includes registration of DNs (messaging object) and DSAs (component object). The AF RA has registered the DN Air Force with DISA and is responsible for all relative distinguished names (RDN) below Air Force. Each MAJCOM, FOA, and functional program will register RDNs below Air Force. Attachment 2 provides guidance for registering the directory system component.

3.2. O/R Addresses: The messaging O/R address is an X.400 address used by the MTA to route and deliver messages. The organization (O) value starts the identification of the address space. Addressing within the MTA domain, the organizational unit (OU)1 as a unique identifier to the site (base, station, region, or program). The OU2 through OU4 levels define individual message delivery points. OU1 through OU4 and common/individual name (cn) attributes of the O/R address are registered by each MAJCOM, FOA, or functional program. Attachment 7 provides guidance for registering the O/R addresses.

3.3. MTAs: The X.400 O/R address is related to the MTA routing architecture and is the software residing on the message host responsible for routing and delivering electronic messages. MTA names are used between MTAs in establishing associations and internal tracing. An MTA name is registered for each MTA. The MTA name is the identification parameter required as input when configuring the MTA software. SRAs will register MTA names. Attachment 6 provides guidance for registering MTA names.

### **4. Information and Templates.**

4.1. Information and templates from the AF RA are distributed to the base via e-mail. The information and templates are also available on the Air Force World Wide Web (WWW) server. Use your WWW browser (for example, Mosaic) and open uniform resource locator (URL): <http://w3.af.mil/DMS/>. This will allow the access, review, and download of all files pertinent to DMS registration.

JOHN S. FAIRFIELD, Lt General, USAF  
DCS/Communications and Information

**GLOSSARY OF REFERENCES, ABBREVIATIONS, ACRONYMS, AND TERMS*****References***

AFI 33-127, *Electronic Messaging Registration and Authority*  
ACP 123, *Common Messaging Strategy and Procedures*

***Abbreviations and Acronyms***

**ACP**—Allied Communications Publication  
**ADMD**—Administration Management Domain  
**AF RA**—Air Force Registration Authority  
**AFI**—Air Force Instruction  
**AFMAN**—Air Force Manual  
**AIG**—Address Indicator Group  
**APO**—Air Force Post Office  
**AUTODIN**—Automatic Digital Network  
**C**—Country  
**CAW**—Certification Authority Workstation  
**cn**—Common/Individual Name  
**DDN**—Defense Data Network  
**DIB**—Directory Information Base  
**DISA**—Defense Information Systems Agency  
**DISN**—Defense Information Systems Network  
**DIT**—Directory Information Tree  
**DMS**—Defense Message System  
**DN**—Distinguished Name  
**DoD**—Department of Defense  
**DRU**—Direct Reporting Unit  
**DSA**—Directory Service Agent  
**DSN**—Defense Switched Network  
**DUA**—Directory User Agent  
**e-mail**—Electronic Mail  
**FAS**—Functional Address Symbol  
**FOA**—Field Operating Agency  
**FPO**—Fleet Post Office  
**HQ AFCA**—Headquarters Air Force Communications Agency  
**HQ SSG**—Headquarters Standard Systems Group  
**HQ USAF**—Headquarters United States Air Force  
**IP**—Internet Protocol  
**ISO**—International Standardization Organization  
**ITU-T**—International Telecommunication Union, Telecommunications  
**MAJCOM**—Major Command  
**MFI**—Multi-Function Interpreter  
**MHS**—Message Handling System  
**mL**—Mail List  
**MLA**—Mail List Agent  
**MTA**—Message Transfer Agent  
**MTS**—Message Transfer System  
**NIC**—Network Information Center  
**ou**—An organizational unit value within the X.500 address  
**O**—Organization  
**O&M**—Operations and Maintenance  
**O/R**—Originator/Recipient  
**OSI**—Open Systems Interconnection  
**OUn**—An organizational unit value within the X.400 address  
**POC**—Point of Contact

**PRMD**—Private Management Domain  
**PUA**—Profiling User Agent  
**RDN**—Relative Distinguished Name  
**s/a**—Service/Agency  
**SMTA**—Subordinate Message Transfer Agent  
**SMTP**—Simple Mail Transport Protocol  
**SRA**—Sub-Registration Authority  
**TCP/IP**—Transmission Control Protocol/Internet Protocol  
**WWW**—World Wide Web  
**UA**—User Agent  
**URL**—Uniform Resource Locator

### **Terms**

**Administration Management Domain (ADMD)**—A collection of MHS entities managed by a common public administrative authority.

**Attribute**—Information of a particular type concerning an object represented by a directory entry.

**Attribute Type**—The component of an attribute that indicates the class of information given by an attribute.

**Attribute Value**—An instance of the class of information indicated by an attribute type.

**Defense Information Systems Network (DISN)**—A future (calendar year 1997 and beyond) worldwide information transfer infrastructure intended to support national defense decision support requirements and corporate information management functional business areas and its subordinate Defense Information System.

**Defense Message System (DMS)**—The United States system that supports exchange of military messages. The DMS implements Allied Communications Publication (ACP) 123, *Common Messaging Strategy and Procedures*, but also embodies more detailed guidance on national issues such as security, management, component implementation, and policy.

**Directory Entry**—A part of the directory information base (DIB) that holds information about an object.

**Directory Information Tree (DIT)**—The logical hierarchical structure of directory information.

**Directory Name**—A unique identifier for a record stored in a distributed directory system. A directory name is resolved by a directory system into a X.400 originator/recipient address, a set of user capabilities, or other information.

**Directory Service Agent (DSA)**—An open systems interconnection (OSI) application process that provides the directory functionality. The DSA application's role is to provide directory user agents (DUA) and other DSAs access to the directory information base (DIB). A DSA may use information stored in its local data base or interact with other DSAs to carry on requests. Alternatively, the DSA may direct a requester to another DSA that can help carry out the request.

**Directory Services**—All services required to satisfy the identification of defense message system (DMS) users, as based on the International Telecommunications Union, Telecommunications X.500 series of recommendations.

**Directory User Agent (DUA)**—An OSI application process that represents the user in accessing the directory. Each DUA serves a single user so that the directory can control access to directory information on the basis of the DUA names. DUAs can also provide a range of utilities to assist users in composing requests (queries) and interpreting responses.

**Distinguished Name (DN)**—The series of RDNs leading from the root of the directory information tree (DIT) to the object of interest.

**Domain Name**—Name of a network where a computer resides (for example, @safb.af.mil). All computers on a network will share the same Domain Name, but will be identified by a unique Host Name.

**Handle**—An alias entry.

**Host Name**—Name of an individual computer (for example, AFCA).

**Internet Protocol (IP)**—Standard that allows dissimilar hosts to connect to each other through the Defense Data Network (DDN).

**International Standardization Organization (ISO)**—The organization responsible for developing and approving international standards.

**Mail List (mL)**—A more specific form of address list that is expanded at a centralized expansion point known as a mail list agent.

**Mail List Agent (MLA)**—A functional component that supports one or more mail lists. An MLA appears to the message transfer system (MTS) as a normal message recipient but acts as an expansion point for a mail list. The MLA expands the list of recipients on the envelope, regenerates the per-recipient tokens in the message security protocol heading, and resubmits the message to the MTS.

**Message Transfer Agent (MTA)**—An OSI application process, defined as part of the X.400 MHS, that denotes an active component involved in the transfer of e-mail messages.

**Multi-Function Interpreter (MFI)**—A functional object that links the Defense Message System (DMS) to other external communication systems. The MFI embodies the military messaging-access unit defined by ACP 123, and also provides additional capabilities. The MFI performs several different operations including content conversion and security processing. Messages processed by the MFI are not always considered delivered by the MTS; it depends on the nature of the MFI processing required.

**Open Systems Interconnection (OSI)**—A classification of standards for promoting global connectivity. OSI standards are generally promulgated by the ISO and used by a variety of standard-setting bodies.

**Originator/Recipient (O/R) Address**—Address of the originator or recipient of an X.400 MHS message.

**Relative Distinguished Name (RDN)**—The name of a vertex of the directory information tree (DIT).

**Root**—The initial vertex of the directory information tree (DIT).

**Schema**—The set of rules concerning directory information tree (DIT) structure, object class definitions, attribute types, matching names, and syntax's characterizing the data base.

**Simple Mail Transport Protocol (SMTP)**—Popular mail protocol used within the internet and other transmission control protocol/internet protocol (TCP/IP) based network environments.

**Subtree**—A collection of entries that represent a subset of the directory information tree (DIT).

**X.400 Address**—The international recommendations developed by the International Telecommunication Union, Telecommunications (ITU-T) for a store-and-forward MHS in a multi-vendor environment.

**X.500 Standard**—Refers to the ITU-T series of recommendations that define the capabilities, structure, and components of the directory.

## DIRECTORY SYSTEM

### A2.1. Purpose.

A2.1.1. Directory systems are a critical component of messaging systems. Directories provide e-mail addresses, phone numbers, fax numbers, and other required information about organizations and individuals. The Air Force will implement a directory system that conforms to the ITU-T X.500 standard. Standardization of the Air Force directory system will allow all Air Force e-mail users to determine the e-mail address of other organizations and individuals. In addition, standardization makes it easier to implement the DMS.

A2.1.2. The purpose of this attachment is to provide guidance and procedures to the SRA that are implementing and maintaining the X.500 directory system. The Air Force will implement a minimum standard directory information tree (DIT) and support a minimum standard schema provided by the DMS program.

See attachment 4 for additional information on the minimum DIT. Registration of directory components by responsible organizations will help to ensure the Air Force directory system provides an acceptable level of support to all Air Force customers and the DoD.

A2.1.3. Directory components that require registration with the AF RA:

A2.1.3.1. DSA name.

A2.1.3.2. DN held by each DSA.

A2.1.3.3. DSA linking information.

A2.1.3.4. DIT.

A2.1.3.5. Directory schema.

A2.1.4. The following additional components (except the profiling user agent [PUA]) are provided during the initial DMS installation. The base may expand these components and add new components with the permission of the AF RA:

A2.1.4.1. Certification authority workstation (CAW).

A2.1.4.2. Multi-Function Interpreter (MFI).

A2.1.4.3. Mail List Agent (MLA).

A2.1.4.4. PUA.

A2.1.4.5. DMS Mail Lists.

A2.1.5. HQ SSG/SINR will provide additional information on DMS directory components when information becomes available.

A2.1.6. This attachment references the DISA NIC document registration procedures for directory DNs, and supplements the NIC procedures with Air Force specific procedures. The NIC procedures and templates are not repeated in this attachment. Specifically, this attachment will provide registration requirements for DSA and directory DN.

### A2.2. Procedures for Directory Component Registration.

A2.2.1. DSA:

A2.2.1.1. The base SRA will request approval from their MAJCOM SRA to register all new Air Force DSAs with the AF RA. The SRA currently maintaining a DSA and, or planning to implement a new DSA must complete the registration template. Templates and instructions for registering DSAs are provided in attachment 3.

A2.2.2. Directory Schema:

A2.2.2.1. The X.500 directory schema is a set of rules controlling all aspects of data base content. The schema defines who can store information in the directory and what information is stored. The information that describes an entry in the directory is called an "attribute."

A2.2.2.2. The AF RA and directory administrator maintain control of who can update the directory and what is put into the directory system. The outline for the Air Force directory will use a standard schema defined in the X.521 directory and X.402 MHS standards. Additional schema attributes are provided by commercial off-the-shelf implementation of the X.500 directory or X.400 MHS.

Directory administrators who need to add additional schema attributes to the directory should contact the AF RA for assistance. For example, new schema attributes are added to support the implementation of DMS. In addition, the directory may contain configuration control information, routing information, and other management information required for DMS implementation. New schema attributes are mandatory for the Air Force directory system. As new schema requirements are approved, the AF RA will distribute these new requirements to all base SRAs.

A2.2.2.3. Different attributes and subtrees of the schema maintained on one DSA may require different update authorities. This will require that the directory system administrator maintain access controls on the information contained in the directory. In addition, access to the directory will require an authentication process and may require access controls on the information maintained in the DSA.

A2.2.2.4. Updating the schema requires a process to validate and, or authenticate the data maintained in the directory. For example, organization names, office symbols, phone numbers, and personal names will require validation (or a valid source) before entry into the directory system. In some cases, you may field some or all the data maintained by one DSA in another DSA. Moreover, the data contained in the schema can come from other information systems. The implementation of a new DSA may require procedures to move the data from the current DSA (or information system) to the new DSA.

A2.2.2.5. Organizations that have unique or unusual schema requirements that do not appear to fit the standard schema structure should contact the AF RA for assistance.

A2.2.2.6. Templates and instructions for registering DSA names and DNs are provided in attachment 3.

A2.2.3. RDN.

A2.2.3.1. Requests for a RDN are validated by the SRA.

A2.2.3.2. Non-DMS (users without a FORTEZZA, type II encryption card, requirement) entries are entered into the X.500 DSA. These requests are approved by the AF RA who only recommends organizational non-DMS entries into the DSA.

## REGISTRATION TEMPLATE

### A3.1. Registration Template for Air Force Directory Name and Directory Service Agent Name.

A3.1.1. Use this template to request and register RDN and DSAs+. This template will also identify the directory system administrators responsible for the DSA and, or RDNs requested. In addition, the information provided by this template will provide the AF RA with the information necessary to construct and maintain the Air Force distributed directory.

A3.1.2. The base SRA will:

A3.1.2.1. Complete the template with required information.

A3.1.2.2. Submit the template to their MAJCOM SRA for coordination and forwarding to the AF RA for processing.

A3.1.3. The AF RA will review the information, assign a DSA name (if required), and provide initial DSA-to-DSA linking information to the SRA with the approval of the DSA name. In addition, DSA administrators may request DSA links to meet specific requirements. The DSA administrator should submit a request to the AF RA by e-mail, identifying the DSAs involved in the proposed link and providing supporting rationale for the direct link.

A3.1.4. The top-level of the DIT for Air Force follows:

countryName = US

organizationName = U.S. GOVERNMENT

organizationalUnitName = DoD

organizationalUnitName = AF

A3.1.5. The following organizational UnitName identifies ou=ORGANIZATIONS, ou=LOCATIONS, and ou=MAIL LIST as registered levels below the level AF. You may request additional ou values below the ou=AF from the AF RA.

OrganizationalUnitName = ORGANIZATIONS (or LOCATIONS or MAIL LIST)

locality = Name of AF location "locally" used below the ou=ORGANIZATIONS or ou=LOCATIONS subtree. This is the FIRST level SRA registers with the AF RA.

mL = Name of AF Mail List "mL =" used only below the ou=MAIL LIST subtree. This is the FIRST level the base SRA registers with the AF RA.

### A3.2. Instructions for Filling in the Relative Distinguished Name/Directory Service Agent Registration Template.

Please read all instructions carefully:

A3.2.1. General Instructions:

A3.2.1.1. To ADD a new RDN and, or DSA name record to the data base, fill out all required fields.

**NOTE:** Required fields are marked with a plus (+) symbol. Include in the non-required fields any additional information applicable to the new RDN or DSA name. **NOTE:** The AF RA may have already created directory subtrees for the major Air Force locations. SRAs are requested to check with the AF RA or the directory system to determine if the requested location is already registered in the directory.

A3.2.1.2. To MODIFY or UPDATE an existing DN or DSA record, enter the appropriate AF RA handle and include only data for the fields that need changing.

A3.2.1.2.1. For comment lines DN1N through DN1R and all address lines, the groups are processed together. A change to any one field within the group requires entries of all fields for the group (that is, when you make an entry in any field, you must update all fields in the group from the template).

A3.2.1.2.2. Enter the keyword "NONE" in any non-required field to erase previous data.

A3.2.1.3. To REMOVE an alternate SRA, enter the keyword "NONE" in the appropriate alternate SRA's last name field. You may MODIFY or UPDATE the primary SRA but may not remove it.



A3.2.1.4. To DEACTIVATE an existing DN or DSA record, enter the AF RA handle and the RDN or DSA name; then place a “Y” in the DEACTIVATE RECORD field.

A3.2.1.5. Provide city, state, and zip code information for all United States addresses. If the address is an Army and Air Force Post Office (APO) or Fleet Post Office (FPO) address, use the city field to enter the letters “APO” or “FPO” and use the state field to enter the APO/FPO two-letter code.

A3.2.1.6. Do not alter the template in any way. Any alteration may result in a corrupt data base entry and delay the registration processing.

A3.2.2. Instructions for individual field entries:

A3.2.2.1. Location or organization unit information.

A3.2.2.1.1. Required only for UPDATES and DEACTIVATES. Do not include a handle when registering a new RDN or a new DSA name. Handles are automatically generated by the AF RA for ADDITIONS to the data base. For example:

+ DN1A. AF RA Handle (see paragraphs A3.2.1.2 and A3.2.1.4):

A3.2.2.1.2. At least one RDN entry is required for all transactions. If requesting a new DSA name, leave DN1G blank and use DN1B through DN1F to identify the RDNs below the RDN ou=AF that this DSA will support. If the new DSA will support more than five RDNs, separate templates must be used to identify all RDNs supported by this DSA. If requesting new RDNs supported by an existing DSA, enter the DSA name in DN1G. Example format of DN1B through DN1F RDN: /ou=ORGANIZATIONS /L=Maxwell AFB Gunter Annex /ou=SSG:

+ DN1B. Requested RDN (1):

DN1C. Requested RDN (2):

DN1D. Requested RDN (3):

DN1E. Requested RDN (4):

DN1F. Requested RDN (5):

DN1G. DSA name currently hosting these directory names:

A3.2.2.1.3. Example of an optional entry:

DN1H. Requested RDN (1) Alias:

DN1I. Requested RDN (2) Alias:

DN1J. Requested RDN (3) Alias:

DN1K. Requested RDN (4) Alias:

DN1L. Requested RDN (5) Alias:

A3.2.2.1.4. Optional for all transactions. You may request your (l) or (ou) be unlisted by indicating “Y” in this entry. The default for this field is “N”. Example:

DN1M. Unlisted? (Y/N):

A3.2.2.1.5. You may add comments in freeform style in the lines provided. Example:

DN1N. Comments Line 1:

DN1O. Comments Line 2:

DN1P. Comments Line 3:

DN1Q. Comments Line 4:

DN1R. Comments Line 5:

A3.2.2.1.6. The following three entries are mandatory for DSA name requests and, or changes: Enter a hardware description (example entries are: PDP-11/44, VAX-11/780, AT&T 3B2, LSI-11/23, C/70, SUN). Enter the operating system used by the computer supporting the DSA (example entries are UNIX, VMS, MOS, TOPS20, SunOS). Enter the transport/service protocols supported (example entries are TCP/IP or TP4).

+ DN1S. CPU Type:

+ DN1T. Operating System:

+ DN1U. Protocols:

A3.2.2.2. Requesting organization address:

A3.2.2.2.1. The following is the name of the organization/agency requesting registration of the RDN or DSA:

+ DN2A. Organization/Agency Name:

A3.2.2.2.2. At least one line of address information is required. This address is the United States postal mailing address for correspondence intended for the requesting organization/agency. Enter up to four lines. Enter the city and the standard two-letter state abbreviation if the requesting organization is located in the United States. For APO and FPO addresses, enter only the two-letter APO/FPO code in line DN2G (for example, AE for New York, AP for California, AA for Florida). The zip code entry is required for APO/FPO and U.S. mailing addresses. Use a nine-digit zip code for APO/FPO addresses; zip codes for other U.S. addresses may be either a five- or nine-digit zip.

+ DN2B. Address Line 1:

DN2C. Address Line 2:

DN2D. Address Line 3:

DN2E. Address Line 4:

+ DN2F. City or FPO/APO (see paragraph A3.2.1.5):

+ DN2G. State or FPO/APO code (see paragraph A3.2.1.5):

+ DN2H. Zip Code (see paragraph A3.2.1.5):

A3.2.2.2.3. Enter the country if it appears in the mailing address:

DN2I. Country:

A3.2.2.3. "DEACTIVATE RECORD?" This entry is for an RDN or DSA decommissioned. Enter a "Y" in this field if you want to deactivate the RDN or DSA. The default is "N".

DN3A. Deactivate Record? (See paragraph A3.2.1.4)(Y/N):

A3.2.2.4. "Point-of-contact (POC) information":

A3.2.2.4.1. All RDNs and DSAs must have a directory administrator (SRA). Provide the name, organization, address, phone number, and e-mail box for at least one directory administrator. This information is added to the data base and the individual is designated as the directory administrator for any questions regarding the RDNs and DSA you are registering. You may enter data for both a primary and alternate directory administrator.

A3.2.2.5. Name information.

A3.2.2.5.1. Both first and last names are required. To help eliminate duplication of names in the data base, include a middle name or initial. Suffix line should include identifiers such as Jr., Sr., II, III, etc. You can include a title or rank.

+ DN4A. Last Name:

+ DN4B. First Name:

DN4C. Middle Name or Initial:

DN4D. Name Suffix:

DN4E. Title/Rank:

A3.2.2.6. Address information:

A3.2.2.6.1. Refer to the instructions in paragraph A3.2.2.2.

+ DN5A. Organization:

+ DN5B. Address Line 1:

DN5C. Address Line 2:

DN5D. Address Line 3:

+ DN5E. City or FPO/APO (see paragraph A3.2.1.5):

+ DN5F. State or FPO/APO Code (see paragraph A3.2.1.5):

+ DN5G. Zip Code (see paragraph A3.2.1.5):

DN5H. Country:

A3.2.2.6.2. Enter the fully qualified Domain Name (full hostname). Separate the username and hostname parts of the mailbox by "@". Otherwise, follow the syntax required for routing mail to your network.

+ DN5I. Network Mailbox:

A3.2.2.6.3. An optional entry for use by the X.400 MTS to deliver messages. The format used is:

(C=Country/ADMD=Administrative Management Domain/PRMD=Private Management Domain/O=Organization/  
OU=Organizational Units/four levels=OU1, OU2, OU3, and OU4/S=Surname/G=Givenname)

An example of a DMS X.400 (no PRMD):

/C=US/ADMD=DMS/O=AL1/S=Allen/G=John/I=E/GG=III/OU1=GUNT1/OU2=SMTA1

DN5J. X.400 O/R Address:

A3.2.2.6.4. This is the name of your "home" host. Enter the full hostname, not the numeric host address.

+ DN5K. Hostname:

A3.2.2.7. Phone Information.

A3.2.2.7.1. Each user must provide at least one phone number. If you have no commercial phone number, provide your Defense Switched Network (DSN) phone number. You can list other numbers:

+ DN6A. Commercial Phone:

DN6B. Commercial Phone Extension:

DN6C. Alternate Phone:

DN6D. Alternate Phone Extension:

DN6E. DSN Phone:

DN6F. DSN Phone Extension:

DN6G. Fax Phone:

A3.2.2.8. Alternate Administrator Information.

A3.2.2.8.1. To register an alternate administrator, follow the instructions given in paragraphs A3.2.2.4 through A3.2.2.7. The procedure is identical:

DN7A through DN9G:

A3.2.3. Instructions for Submitting Registration Data:

A3.2.3.1. Please forward all requests for component modifications/additions/deletions and all DIT modifications through your MAJCOM SRA to the AF RA at "register@ddn.af.mil". Address questions to the same mailbox or call the AF RA at

Commercial: 1-334-416-6102/6112 or DSN: 596-6103/6112 for assistance. We will process RDN and DSA registrations within 10 working days of receipt if all data is included and there are no problems with the information supplied.

A3.2.3.2. If you do not have access to e-mail facilities, submit hard copy applications to the following address: HQ SSG/SINR, ATTN: Air Force Registration Authority, 201 East Moore Drive, Maxwell AFB, Gunter Annex, AL 36114-6343.

A3.2.3.3. Hard copy registrations require manual input and will delay the process of your request. We strongly discourage hard copy registrations.

A3.2.4. Blank Template (do not change template).

#### LOCATION OR ORGANIZATION UNIT INFORMATION:

+ DN1A. AF RA Handle (see paragraphs A3.2.1.2 and A3.2.1.4):

+ DN1B. Requested RDN(1):

DN1C. Requested RDN (2):

DN1D. Requested RDN (3):

DN1E. Requested RDN (4):

DN1F. Requested RDN (5):

DN1G. DSA name currently hosting these directory names:

DN1H. Requested RDN (1) Alias:

DN1I. Requested RDN (2) Alias:

DN1J. Requested RDN (3) Alias:

DN1K. Requested RDN (4) Alias:

DN1L. Requested RDN (5) Alias:

DN1M. Unlisted? (Y/N):

DN1N. Comments Line 1:

DN1O. Comments Line 2:

DN1P. Comments Line 3:

DN1Q. Comments Line 4:

DN1R. Comments Line 5:

+ DN1S. CPU Type:

+ DN1T. Operating System:

+ DN1U. Protocols:

## REQUESTING ORGANIZATION ADDRESS:

+ DN2A. Organization/Agency Name:

+ DN2B. Address Line 1:

DN2C. Address Line 2:

DN2D. Address Line 3:

DN2E. Address Line 4:

+ DN2F. City or FPO/APO (see paragraph A3.2.1.5):

+ DN2G. State or FPO/APO Code (see paragraph A3.2.1.5):

+ DN2H. Zip Code (see paragraph A3.2.1.5):

DN2I. Country:

## DEACTIVATE RECORD?

DN3A. Deactivate Record?.(see paragraph A3.2.1.4)(Y/N):

## POINT OF CONTACT INFORMATION:

## NAME INFORMATION

+ DN4A. Last Name:

+ DN4B. First Name:

DN4C. Middle Name or Initial:

DN4D. Name Suffix:

DN4E. Title/Rank:

## ADDRESS INFORMATION:

+ DN5A. Organization:

+ DN5B. Address Line 1:

DN5C. Address Line 2:

DN5D. Address Line 3:

+ DN5E. City or FPO/APO (see paragraph A3.2.1.5):

+ DN5F. State or FPO/APO Code (see paragraph A3.2.1.5):

+ DN5G. Zip Code (See paragraph A3.2.1.5):

DN5H. Country:

+ DN5I. Network Mailbox:

DN5J. X.400 O/R Address:

+ DN5K. Hostname:

#### PHONE INFORMATION:

+ DN6A. Commercial Phone:

DN6B. Commercial Phone Extension:

DN6C. Alternate Phone:

DN6D. Alternate Phone Extension:

DN6E. DSN Phone:

DN6F. DSN Phone Extension:

DN6G. Fax Phone:

#### ALTERNATE ADMINISTRATOR INFORMATION:

##### NAME INFORMATION:

+ DN7A. Alternate POC Last Name:

+ DN7B. First Name:

DN7C. Middle Name or Initial:

DN7D. Name Suffix:

DN7E. Title/Rank:

##### ADDRESS INFORMATION

+ DN8A. Organization:

+ DN8B. Address Line 1:

DN8C. Address Line 2:

DN8D. Address Line 3:

+ DN8E. City or FPO/APO (see paragraph A3.2.1.5):

+ DN8F. State or FPO/APO Code (see paragraph A3.2.1.5):

+ DN8G. Zip Code (see paragraph A3.2.1.5):

DN8H. Country:

+ DN8I. Network Mailbox:

DN8J. X.400 O/R Address:

+ DN8K. Hostname:

#### PHONE INFORMATION:

+ DN9A. Commercial Phone:

DN9B. Commercial Phone Extension:

DN9C. Alternate Phone:

DN9D. Alternate Phone Extension:

DN9E. DSN Phone:

DN9F. DSN Phone Extension:

DN9G. Fax Phone:



AIR FORCE DIRECTORY INFORMATION TREE

A4.1. Entries in a X.500 directory are related to each other by using a hierarchical structure termed the “Directory Information Tree” (DIT). A “Distinguished Name” (DN) is a unique structure that identifies an entry in the directory.

A4.2. A DN is a value assigned to an object through registration, and thereafter serves to uniquely identify that particular object. A DN provides a means of identifying an object. By definition, a DN is unambiguous as (or because) it identifies just one object.

A4.3. Each directory entry is named by an ordered sequence of naming attributes called “Relative Distinguished Names” (RDN). A RDN is the name of a position within the DIT. The sequence of RDNs that lead from the root of the DIT to the object represent the object’s DN. Because the DIT is a tree, there is a unique path from the root to the object’s entry. DNs are unique and unambiguous within the directory, and, therefore, throughout the entire networked directory environment. RDNs, which are components of the DN, are not unique.

A4.4. Table A4.1 shows the currently registered DoD DIT and how a partial Air Force DN is constructed from the concatenation of RDNs beginning at the root of the DIT. The top levels of the DIT for the Air Force follow:

Table A4.1. Air Force Directory Information Tree.

<b>ROOT</b>		
CountryName (c)	=	US
OrganizationName (o)	=	U.S. GOVERNMENT
OrganizationalUnitName (ou)	=	DoD
OrganizationalUnitName (ou)	=	AF (Name of Service or Agency. This is the level registered with DISA by each service/agency [AF RA])
Directory entries below OrganizationalUnitName	=	Maintained by the service/agency

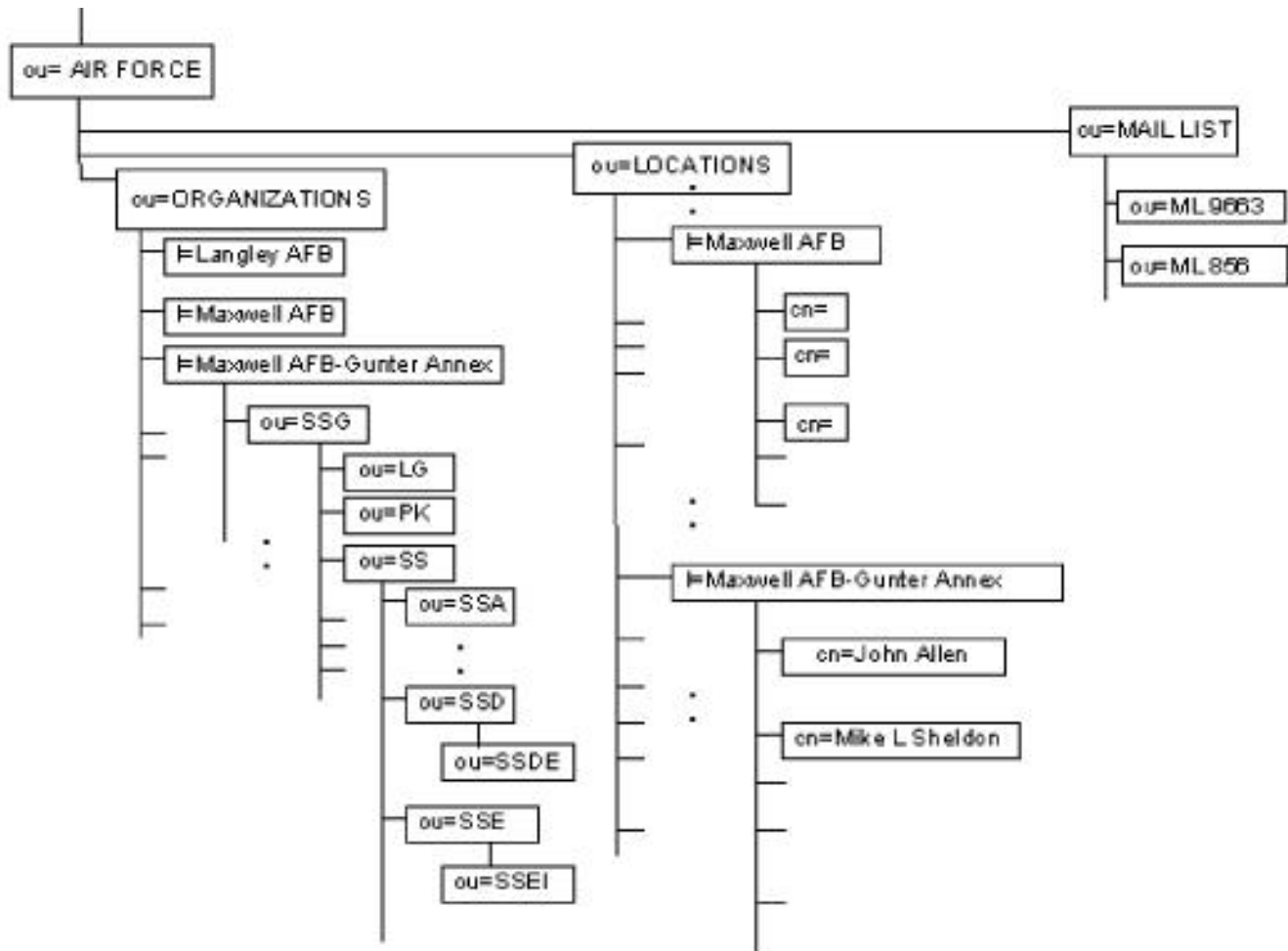
A4.5. The levels above ou=AF are registered by DISA and other government registration authorities. The AF RA registered the name “AF” as an RDN below the ou=DOD RDN and is now responsible for maintaining the RDNs below ou=AF.

A4.6. The AF RA (working with DISA) has developed a directory naming standard that will support the organizational and individual messaging requirements of Air Force users. This naming structure requires standardizing the name structure and registration of RDNs.

A4.7. The AF RA will implement a directory system that will act as the Air Force root directory and will provide Air Force users with access to other directory sub-systems. This attachment shows a lower-level transitional Air Force DIT. This DIT structure is used as a minimum structure to build the Air Force directory subtree. The implementation of DMS affects the structure of the DIT and requires changes to the DNs used in the current implementation of X.500. We will provide additional guidance on implementing DMS X.500 directories as information becomes available.

A4.8. Figure A4.1 is an example hierarchy of a typical DIT.

Figure A4.1. Air Force Directory.



A4.9. Two examples of DNs constructed from the information contained in Table A4.1 and Figure A4.1:

Organizational Name: c=US, o=U.S. GOVERNMENT, ou=DoD, ou=AF, ou=ORGANIZATIONS, l=MAXWELL AFB-GUNTER ANNEX, ou=SSG, ou=SS, ou=SSD

Individual Name: c=US, o=U.S. GOVERNMENT, ou=DOD, ou=AF, ou=LOCATIONS, l=MAXWELL AFB-GUNTER ANNEX, cn=JOHN ALLEN

A4.10. The Air Force directory name will contain three entries registered and maintained by the AF RA below the ou=AF. These entries are: ou=ORGANIZATIONS, ou=LOCATIONS, and ou=MAIL LIST.

ou=ORGANIZATIONS Subtree:

L=(AF Location Name): "AF Location Name" normally is an Air Force Base, but could include any location with an AF presence. The AF RA has already registered major "AF Location Names" and maintains them in the Air Force root directory. The SRA may obtain approval to implement DSAs for these locations, and becomes the update authority for these locations. In this event, the AF RA will remove the "AF Location Name" from the Air Force root directory and build a DSA-DSA link to the SRA directory for that "AF Location Name."

ou=(AF Organization Name): The ou= (AF Organization Name) will contain the approved abbreviation for AF RA organi-

zation at the “AF Location Name.” This requirement includes organizations that are at the “AF Location Name” but not in the SRA span of control, i.e., tenants, other S/a organizations, contractors using Air Force resources, non-DoD activities. This also includes organizations that are not physically located at the “AF Location Name” but derive their support and address from the “AF Location Name” (that is, organizations that are in rented space off-base, organizations that obtain all their support from the “AF Location Name”). Update authority is delegated to other organizations for directory entries applicable to their organization.

ou=(AF Organization Two Letter Office Symbol): Only two-letter office symbol at the location for each ou=(AF Organization Name) is maintained at this level. Two-letter office symbols not at the current location are maintained in other L=(AF Location Name) subtrees if the “AF Organization Name” is also repeated in the other L=(AF Location Name) subtree.

ou=(AF Organization Other Office Symbols): This is the lowest level of the ou=ORGANIZATIONS subtree and completes the Directory DN for organizational entries.

ou=LOCATIONS Subtree:

L= (AF Location Name): “AF Location Name” normally is an Air Force base, but could include any location with an Air Force presence. The AF RA has already registered major “AF Location Names”, and maintains in the Air Force root directory. The SRA obtains approval to implement DSAs for these locations, and becomes the update authority for these locations. In this event, the AF RA will remove the “AF Location Name” from the Air Force root directory and build a DSA-DSA link to the SRA directory for that “AF Location Name.”

CN= (common/individual name): The individual name is constructed as first name, middle initial, last name, and generation. CN= is the last entry in the ou=LOCATIONS subtree and completes the Directory DN for individual entries.

ou=MAIL LIST Subtree: Contains registration of subtrees of major mail lists that do not fit into the normal, organizations and locations subtrees described above. For example, a mail list might exist in functional areas and major programs. A mail list is also used to transition (Automatic Digital Network [AUTODIN]) to DMS. An X.500 entry will serve the same purpose as an Address Indicator Group (AIG). Each mail list manager is responsible for the accuracy of their mail list. Lower levels of the DIT are provided by the SRA from the mail list manager. Any SRA considering implementation of a ou=MAIL LIST subtree should contact the base SRA, the MAJCOM SRA, or the AF RA, as required, for additional guidance.

## MESSAGE HANDLING SYSTEM

### **A5.1. Purpose.**

A5.1.1. This attachment provides guidance and procedures to the SRA that will implement and maintain the X.400 MHS. Registration of message system components by responsible organizations will help to ensure the Air Force message system provides an acceptable level of support to all Air Force customers and the DoD.

A5.1.2 This attachment references the DISA NIC document, registration procedures for X.400 O/R addresses, and MTA names, and supplements the NIC procedures with Air Force specific procedures. The NIC procedures and templates are not repeated in this attachment. Specifically, this attachment will provide registration requirements for MTAs and O/R addresses.

### **A5.2. Procedures for Message System Component Registration.**

A5.2.1. MTA. All new Air Force MTAs are registered by the base SRA through the MAJCOM SRA and forwarded to the AF RA. The MTA registration template is used to collect information for each MTA that identifies the MTA location, hardware and software, O/R addresses supported by subordinate MTAs (SMTA), gateway information, and the POC responsible for the operation and update of the MTA. If registering a new O/R address for an existing MTA name, use the O/R address template.

A5.2.1.1. Instructions for registering MTA names are provided in attachment 6.

A5.2.2. O/R Address.

A5.2.2.1. All new O/R addresses are registered by the base SRA through the MAJCOM SRA and forwarded to the AF RA. The O/R address registration template is used to collect information for each O/R address that identifies the MTA supporting the O/R address and the POC responsible for maintaining the O/R address. If the MTA is not registered, the MTA administrator should complete the MTA name registration template and the O/R address template, and submit both as a single registration request.

A5.2.2.2. Refer to attachment 8 for additional background information on O/R addresses. SRAs that have unique or unusual address requirements that do not appear to fit the recommended standard O/R address structure should contact the AF RA for assistance.

A5.2.2.3. Instructions for registering O/R addresses are provided in attachment 7.

## MESSAGE TRANSFER AGENT REGISTRATION TEMPLATE

### A6.1. Registration Template for Air Force Message Transfer Agents:

A6.1.1. This template is used to register X.400 MTAs only within the Air Force. In addition, the template will identify the MTA administrators responsible for

the MTA and O/R addresses requested.. In addition, the information provided by this template will provide the AF RA with the information necessary to maintain the Air Force MHS.

A6.1.2. The base SRA will:

A6.1.2.1. Complete the template with required information.

A6.1.2.2. Submit the template to their MAJCOM SRA for coordination and forward to the AF RA for processing.

A6.1.3. The AF RA will review the information, get an MTA name from the NIC (if required), provide the O= value assigned by the DISA DMS, and provide initial MTA-to-MTA linking information to the MTA administrator. In addition, MTA administrators may request MTA links (bilateral agreements) to meet specific organizational requirements. The MTA administrator should submit a request to the AF RA by e-mail, identifying the MTAs involved in the proposed link and provide supporting rationale for the direct link.

### A6.2. How to Fill in the Message Transfer Agent Registration Template. Read all instructions carefully.

A6.2.1. General Instructions.

**NOTE:** UPDATES and DEACTIVATES always require the entry of an AF RA handle.

A6.2.1.1. To ADD a new MTA record to the data base, fill out all required fields. Required fields are marked with a plus (+) symbol. Include in the non-required fields any additional information that is applicable to the new host.

A6.2.1.2. To MODIFY or UPDATE an existing MTA record, enter the appropriate AF RA handle and include only data for the fields that need changing.

A6.2.1.2.1. For the groups of fields MTA1D through MTA1H and all address lines, the entire group is processed together. A change to any one field within the group requires entries of all fields for the group (that is, if you make an entry in any field, then you must update all fields in the group from the template).

A6.2.1.2.2. Enter the keyword "NONE" in any non-required field to erase previous data.

A6.2.1.3. To REMOVE an alternate SRA, enter the keyword "NONE" in the appropriate alternate SRA's last name field. You may MODIFY or UPDATE the primary SRA but not remove it.

A6.2.1.4. To DEACTIVATE an existing MTA record, enter the AF RA handle, the PRMD, and the requesting organization name; then place a "Y" in the DEACTIVATE MTA field.

A6.2.1.5. Supply city, state, and zip code information for all United States addresses. If the address is an APO or FPO address, use the city field to enter the letters "APO" or "FPO" and use the state field to enter the APO/FPO two-letter code.

A6.2.1.6. Do not alter the templates in any way. Any alteration may result in a corrupt data base entry and delay the registration processing.

A6.2.2. Instructions for Individual Field Entries.

A6.2.2.1. MTA Information:

A6.2.2.1.1. Required only for UPDATES and DEACTIVATES. Do not include a handle when registering a new MTA. Handles are automatically generated by the AF RA for ADDITIONS to the data base.

+ MTA1A. AF RA Handle (see paragraphs A.6.2.1.2 and A6.2.1.4):

A6.2.2.1.2. Required for AF RA new MTA added to the data base; it is also required for UPDATES and DEACTIVATES.

+ MTA1B. PRMD:

A6.2.2.1.3. Required for all transactions. This is the name of the executive agent or s/a that has operations and maintenance (O&M) responsibility for the MTA.

+ MTA1C. Service/Agency Name:

A6.2.2.1.4. MTA1D, Comment Line 1 required for SMTAs only. Must contain the O/R addresses that this SMTA will support. Additional comment lines are used for additional O/R addresses (OU1 and OU2) supported by this SMTA. If the SMTA supports more than four O/R addresses, use the O/R address template to register the remaining O/R addresses. If this MTA

supports gateway services (MFI) to other electronic messaging systems, MTA1H, Comment Line 5 must contain the types of gateways supported. For example:

If the MTA supports simple mail transport protocol (SMTP) and AUTODIN gateway services, MTA1H will contain: "SMTP, AUTODIN". Use the O/R address template to register O/R addresses for an existing MTA.

MTA1D. Comments Line 1:

MTA1E. Comments Line 2:

MTA1F. Comments Line 3:

MTA1G. Comments Line 4:

MTA1H. Comments Line 5:

A6.2.2.2. MTA Physical Location.

A6.2.2.2.1. This is the actual location of the MTA and may be different from the address of the requesting organization.

6.2.2.2.2. At least one line of address information is required. This address is the United States postal mailing address for correspondence intended for your host. Enter up to four lines.

A6.2.2.2.3. Enter the city and the standard two-letter state abbreviation if your host is located in the United States.

A6.2.2.2.4. If you have an APO/FPO address, enter only the two-letter APO/FPO code in line MTA2F (for example, AE for New York, AP for California, AA for Florida).

A6.2.2.2.5. The zip code entry is required for APO/FPO and U.S. mailing addresses. Use a nine-digit zip code for APO/FPO addresses; use either a five- or nine-digit zip for other United States addresses.

+ MTA2A. Address Line 1:

MTA2B. Address Line 2:

MTA2C. Address Line 3:

MTA2D. Address Line 4:

+ MTA2E. City or FPO/APO (see paragraph A6.2.1.5):

+ MTA2F. State or FPO/APO Code (see paragraph A6.2.1.5):

+ MTA2G. Zip Code (see paragraph A6.2.1.5):

A6.2.2.2.6. Enter the country if it should appear in your mailing address.

MTA2H. Country:

A6.2.2.2.7. Enter a "1." Each MTA requires a separate template.

+ MTA2I. Number of MTAs per location:

A6.2.2.2.8. Required. CPU type = machine type. Some example entries are: PDP-11/44, VAX-11/780, LSI-11/23, C/70, SUN.

+ MTA2J. CPU Type:

A6.2.2.2.9. Required. Some example entries are: UNIX, VMS, MOS, TOPS20, SunOS.

+ MTA2K. Operating System:

A6.2.2.2.10. Required. Protocols = transport protocol/service provided. Some example entries are: TP4/84 X.400, TP4/X88 DMS X.400, etc.

+ MTA2L. Protocols:

A6.2.2.3. Requesting Organization Address.

A6.2.2.3.1. This is required for all requests. See paragraph A6.2.2.2 for direction on entry of address fields.

+ MTA3A. Organization/Agency Name:

+ MTA3B. Address Line 1:

MTA3C. Address Line 2:

MTA3D. Address Line 3:

MTA3E. Address Line 4:

+ MTA3F. City or FPO/APO (see paragraph A6.2.1.5):

+ MTA3G. State or FPO/APO Code (see paragraph A6.2.1.5):

+ MTA3H. Zip Code (see paragraph A6.2.1.5):

MTA3I. Country:

A6.2.2.4. Deactivate MTA Value Record.

A6.2.2.4.1. This entry is for an MTA that you want to deactivate. Enter a "Y" in this field if you want to delete the data base record for your MTA. The default is (N).

MTA4. Deactivate MTA? (see paragraph A6.2.1.4)(Y/N):

A6.2.2.5. POC Information.

A6.2.2.5.1. All MTAs must have an MTA administrator. Provide the name, address, phone number, and e-mail box for at least one MTA administrator. If the MTA administrator is currently registered with the NIC, include the NIC handle and any information requiring update. If the POC is not registered in the NIC's OSI WHOIS data base, please provide complete information. This information is added to the data base, and the individual is designated as a POC for any questions regarding the MTA you are registering. You may enter data for both a primary POC and an alternate POC.

A6.2.2.5.2. Required only for UPDATES and DEACTIVATES. Do not include a handle when you are identifying a new user as POC. Handles are automatically generated by the NIC for all user records that are newly added to the data base. Example: ABC123 (NIC handle for the POC).

+ MTA5. NIC Handle (see paragraph A.6.2.1.2, A6.2.1.3):

A6.2.2.6. Name Information.

A6.2.2.6.1. Both first and last names are required. We suggest including a middle name or initial to help eliminate duplication of names in the data base.

Suffix line should include identifiers such as Jr., Sr., II, III. A title or rank is included.

+ MTA6A. Last Name:

+ MTA6B. First Name:

MTA6C. Middle Name or Initial:

MTA6D. Name Suffix:

MTA6E. Title/Rank:

A6.2.2.7. Address Information.

A6.2.2.7.1. Refer to paragraph A6.2.2.2 instructions for MTA address information.

+ MTA7A. Address Line 1:

MTA7B. Address Line 2:

MTA7C. Address Line 3:

MTA7D. Address Line 4:

+ MTA7E. City or FPO/APO (see paragraph A6.2.1.5):

+ MTA7F. State or FPO/APO Code (see paragraph A6.2.1.5):

+ MTA7G. Zip Code (see paragraph A6.2.1.5):

MTA7H. Country:

A6.2.2.7.2. Enter the Fully Qualified Domain Name (full hostname). Separate the username and hostname parts of the mailbox by "@". Otherwise, follow the syntax required for routing mail to your network.

+ MTA7I. Network Mailbox:

A6.2.2.7.3. An optional entry for use by the X.400 MTS to deliver messages. The format is:

Country US

ADMD DMS

PRMD



O AL1

OU1 GUNT1

OU2 SMTA1

S DOE

G JOHN

I E

GQ III

An example of a DMS X.400 (no PRMD):

/C=US/ADMD=DMS/O=AL1/S=Allen/G=John/I=E/GG=III/OU1=GUNT1/OU2=SMTA1

MTA7J. X.400 O/R Address:

A6.2.2.7.4. This is the name of your "home" host. Enter the full hostname, not the numeric host address.

+ MTA7K. Hostname:

A6.2.2.8. Phone Information.

A6.2.2.8.1. Each POC provides at least one phone number. If you have no commercial phone number, provide your DSN phone number. Other numbers are also listed.

+ MTA8A. Commercial Phone:

MTA8B. Commercial Phone Extension:

MTA8C. Alternate Phone:

MTA8D. Alternate Phone Extension:

MTA8E. DSN Phone:

MTA8F. DSN Phone Extension:

MTA8G. Fax Phone:

A6.2.2.9. Alternate Information.

A6.2.2.9.1. To register an alternate POC, follow the instructions given in paragraphs A6.2.2.5 through A6.2.2.8. The procedure is identical.

MTA9A through MTA12G

A6.2.3. Instructions for Submitting Registration Data.

A6.2.3.1. Forward all host registration data through your MAJCOM SRA to the AF RA at "register@ddn.af.mil". Address questions to the same mailbox or call the AF RA Help Desk at 1-334-416-6102/6112 (DSN: 596) for assistance. We will process MTA registrations within 10 working days of receipt if all data is included and there are no problems with the information you have supplied. For an MTA that does not fall under one of the established registration guidelines, the AF RA will require the requester to supply additional documentation with their application.

A6.2.3.2. If you do not have access to e-mail facilities, submit hard copy applications to the following address:

HQ SSG/SINR

ATTN:: Air Force Registration Authority

201 East Moore Dr.

Maxwell AFB, Gunter Annex, AL 36114-6343

A6.2.3.3. Hard copy registrations require manual input and will delay the process of your request. We strongly discourage hard copy registrations.

A6.2.4. Blank Template. Do not alter template:

#### MTA-NAME INFORMATION

+ MTA1A. NIC Handle (See paragraphs A.6.2.1.2 and A6.2.1.4):

+ MTA1B. PRMD:

+ MTA1C. Service/Agency Name:

MTA1D. Comments Line 1:

MTA1E. Comments Line 2:

MTA1F. Comments Line 3:

MTA1G. Comments Line 4:

+ MTA1H. Comments Line 5:

#### MTA PHYSICAL LOCATION

+ MTA2A. Address Line 1:

MTA2B. Address Line 2:

MTA2C. Address Line 3:

MTA2D. Address Line 4:

+ MTA2E. City or FPO/APO (see paragraph A6.2.1.5):

+ MTA2F. State or FPO/APO Code (see paragraph A6.2.1.5):

+ MTA2G. Zip Code (see paragraph A6.2.1.5):

MTA2H. Country:

+ MTA2I. Number of MTAs per location:

+ MTA2J. CPU Type:

+ MTA2K. Operating System:

+ MTA2L. Protocols:

#### REQUESTING ORGANIZATION ADDRESS

+ MTA3A. Organization/Agency Name:

+ MTA3B. Address Line 1:

MTA3C. Address Line 2:

MTA3D. Address Line 3:

MTA3E. Address Line 4:

+ MTA3F. City or FPO/APO (see paragraph A6.2.1.5):

+ MTA3G. State or FPO/APO Code (see paragraph A6.2.1.5):

+ MTA3H. Zip Code (see paragraph A6.2.1.5):

MTA3I. Country:

#### DEACTIVATE MTA VALUE RECORD

MTA4. Deactivate MTA? (see paragraph A6.2.1.4)(Y/N):

#### POINT OF CONTACT INFORMATION

+ MTA5. NIC Handle (see paragraphs A6.2.1.2 and A6.2.1.3):

#### NAME INFORMATION

+ MTA6A. Last Name:

+ MTA6B. First Name:

MTA6C. Middle Name or Initial:

MTA6D. Name Suffix:

MTA6E. Title/Rank:

#### ADDRESS INFORMATION

+ MTA7A. Address Line 1:

MTA7B. Address Line 2:

MTA7C. Address Line 3:

MTA7D. Address Line 4:

+ MTA7E. City or FPO/APO (see paragraph A6.2.1.5):

+ MTA7F. State or FPO/APO Code (see paragraph A6.2.1.5):

+ MTA7G. Zip Code (see paragraph A6.2.1.5):

MTA7H. Country:

+ MTA7I. Network Mailbox:

MTA7J. X.400 O/R Address:

+ MTA7K. Hostname:

#### PHONE INFORMATION

+ MTA8A. Commercial Phone:

MTA8B. Commercial Phone Extension:

MTA8C. Alternate Phone:

MTA8D. Alternate Phone Extension:

MTA8E. DSN Phone:

MTA8F. DSN Phone Extension:

MTA8G. Fax Phone:

#### ALTERNATE POINT-OF-CONTACT INFORMATION

+ MTA9. NIC Handle (see paragraphs A6.2.1.2 and A6.2.1.3):

## NAME INFORMATION

+ MTA10A. Last Name:

+ MTA10B. First Name:

MTA10C. Middle Name or Initial:

MTA10D. Name Suffix:

MTA10E. Title/Rank:

## ADDRESS INFORMATION

+ MTA11A. Address Line 1:

MTA11B. Address Line 2:

MTA11C. Address Line 3:

MTA11D. Address Line 4:

+ MTA11E. City or FPO/APO (see paragraph A6.2.1.5):

+ MTA11F. State or FPO/APO Code (see paragraph A6.2.1.5):

+ MTA11G. Zip Code (see paragraph A6.2.1.5):

MTA11H. Country:

+ MTA11I. Network Mailbox:

MTA11J. X.400 O/R Address:

+ MTA11K. Hostname:

## PHONE INFORMATION

+ MTA12A. Commercial Phone:

MTA12B. Commercial Phone Extension:

MTA12C. Alternate Phone:

MTA12D. Alternate Phone Extension:

MTA12E. DSN Phone:

MTA12F. DSN Phone Extension:

MTA12G. Fax Phone:

## ORIGINATOR/RECIPIENT ADDRESS REGISTRATION TEMPLATE

### A7.1 Registration Template for Air Force Originator/Recipient Address (O/R Address):

A7.1.1. Use this template to register organization unit. In addition, the template will identify the O/R address update authorities and authorities and administrators responsible for the O/R addresses requested. The information provided by this template will provide the AF RA with the information necessary to maintain the Air Force MHS. Instructions for filling in the organizational unit registration template. Read all instructions carefully.

A7.1.2. The SRA will:

A7.1.2.1. Request the latest registration template from the base SRA.

A7.1.2.2. Complete the template with required information.

A7.1.2.3. Submit the template to their base SRA, MAJCOM SRA for coordination and forward to the AF RA for processing.

A7.1.3. The AF RA will review the information and provide additional MTA-to-MTA linking information (if required) to the SRA with the approval request. The MTA administrator needs to consider MTA linking requirements when requesting O/R addresses for existing MTAs. MTA administrators may request through the base SRA additional MTA links to meet specific requirements. The base SRA will submit a request through their MAJCOM SRA to the AF RA by e-mail identifying the MTAs involved in the proposed link and provide supporting rationale for the direct link.

A7.1.4. General Instructions.

**NOTE:** UPDATES and DEACTIVATES always require the entry of an AF RA handle.

A7.1.4.1. To ADD a new O/R address record to the data base, fill out all required fields. Required fields are marked with a plus (+) symbol. Include in the non-required fields any additional information that is applicable to the new OU1/OU2.

A7.1.4.2. To MODIFY or UPDATE an existing OU1/OU2 or POC record, enter the appropriate AF RA handle and include only data for the fields that need changing.

A7.1.4.2.1. For the group of fields OU1E through OU1I, and all address lines, the entire group is processed together. A change to any one field within the group requires entries for all fields in the group (that is, entry in any field in the group causes update to all fields from the template). Enter the keyword "NONE" in any non-required field to erase previous data.

A7.1.4.3. To REMOVE an alternate SRA, enter the keyword "NONE" in the appropriate alternate SRA last name field. You may MODIFY or UPDATE the primary SRA but not remove it.

A7.1.4.4. To DEACTIVATE an existing OU1/OU2 record, enter the handle and the OU1/OU2 name; then place a "Y" in the DEACTIVATE OU1 field.

A7.1.4.5. Provide city, state, and zip code information for all United States addresses. If the address is an APO or FPO address, use the city field to enter the letters "APO" or "FPO" and use the state field to enter the APO/FPO two-letter code.

A7.1.4.6. DO NOT ALTER THE TEMPLATES IN ANY WAY. Any alteration may result in a corrupt data base entry and delay the registration processing.

A7.1.5. Instructions for Individual Field Entries

A7.1.5.1. Organization Unit Information.

A7.1.5.1.1. Required only for UPDATES and DEACTIVATES. Do not include a handle when registering a new OU1/OU2. Handles are automatically generated by the AF RA for ADDITIONS to the data base.

+ OU1A. AF RA Handle (see paragraphs A7.1.4.2 and A7.1.4.4):

A7.1.5.1.2. The following PRMDs currently exist.

A7.1.5.1.2.1. Leave blank for DMS-compliant.

GOV+DMS+TRANS -non-DMS-Compliant PRMD on unclassified DoD network

GOV+DMS+TRANS1 - non-DMS-Compliant PRMD on secret DoD network

GOV+DMS+TRANS3 - non-DMS-Compliant PRMD on TS/SCI DoD network

+ OU1B PRMD:

A7.1.5.1.3. Required. Provide the target date for migrating to a full DMS compliant system.

+ OU1C. DMS target date:

A7.1.5.1.4. Required for all transactions. Include the O-value with the requested OU1. The OU1 requested are unique within each O-value. The entry is a printable string with a Maximum of 64 characters. Double quotes around the OU1 are optional (see X.411 Specification). OU2-values and below are registered if update authority has been delegated below the MTA administrator. If requesting an OU2 within an OU1, this field must contain the O, OU1, and the OU2, separated by: "/OU1" and "/OU2=": For example: /O= AL1 /OU1=GUNT1 /OU2=SMTA1 is requesting registration of a office symbol under the OU1 of GUNT1 and under the O of AL1. Additional guidelines are described in attachment 8. Only one OU1/OU2 (or below) (if used) is registered on one template.

**NOTE:** The AF RA will provide the O-Value to the applicant as part of the MTA registration process.

+ OU1D. Requested OU1:

A7.1.5.1.5. Required OU1E, Comment Line 1, if requesting OU2 registration: Enter the MTA name that will support this range of O/R Addresses. Add comments in free-form style in the lines provided. Such as other X.400 requirements or related operational requirements.

OU1E. Comments Line 1:

OU1F. Comments Line 2:

OU1G. Comments Line 3:

OU1H. Comments Line 4:

OU1I. Comments Line 5:

A7.1.5.2. Requesting Organization Address.

A7.1.5.2.1. This is the name of the organization/agency that is requesting registration of the OU1/OU2.

+ OU2A. Organization/Agency Name:

A7.1.5.2.2. At least one line of address information is required. This address is the United States postal mailing address for correspondence intended for the requesting organization/agency. Enter four lines. Enter the city and the standard two-letter state abbreviation if the requesting organization is located in the United States.

A7.1.5.2.3. If the organization has an APO/FPO address, enter only the two-letter APO/FPO code in line OU2G (for example, AE for New York, AP for California, AA for Florida).

A7.1.5.2.4. The zip code entry is REQUIRED for APO/FPO and U.S. mailing addresses. Supply a nine-digit zip code for APO/FPO addresses; enter either a five- or nine-digit zip for other U.S. addresses.

+ OU2B. Address Line 1:

OU2C. Address Line 2:

OU2D. Address Line 3:

OU2E. Address Line 4:

+ OU2F. City or FPO/APO (see paragraph A7.1.4.5):

+ OU2G. State or FPO/APO Code (see paragraph A7.1.4.5):

+ OU2H. Zip Code (see paragraph A7.1.4.5):

A7.1.5.2.5. Enter the country if it should appear in your mailing address.

OU2I. Country:

A7.1.5.3. DEACTIVATE OU1 RECORD?

A7.1.5.3.1. This entry is for a OU1/OU2 that has been deactivated. Enter a "Y" in this field if you want to deactivate the data base record for your OU1. The default is (N).

OU3A. Deactivate OU1?.(see paragraph A7.1.4.4)(Y/N):

A7.1.5.4. POC Information.

A7.1.5.4.1. All OU1s and OU2s must have a registered POC. The OU1s and OU2s POC information is submitted by the SRA. Please provide the name, address, phone number, and e-mail box for at least one POC. If the POC is currently registered with the NIC, include the NIC HANDLE and any information requiring update. If the POC is not already registered in the NIC's WHOIS data base, please provide complete information. This information is added to the data base, and the individual is designated as a POC for any questions regarding the OU1 you are registering. Enter data for both a Primary and Alternate POC.

A7.1.5.4.2. Required only for UPDATES and DEACTIVATES. DO NOT include a handle when you are registering a new user as a POC. Handles are automatically generated by the NIC for all user records that are newly added to the data base. Example: RM64 (NIC handle for POC):

+ OU4A. NIC Handle (see paragraphs A7.1.4.2 and A7.1.4.3):

A7.1.5.5. Name Information.

A7.1.5.5.1. Both first and last names are required. We suggest including a middle name or initial, as that helps to eliminate duplication of names in the data base. Suffix line should include identifiers such as Jr., Sr., II, III, etc. A title or rank is included.

+ OU5A. Last Name:

+ OU5B. First Name:

OU5C. Middle Name or Initial:

OU5D. Name Suffix:

OU5E. Title/Rank:

A7.1.5.6. Address Information.

A7.1.5.6.1. See paragraph A7.1.5.2 for requesting organization address.



+ OU6A. Address Line 1:

OU6B. Address Line 2:

OU6C. Address Line 3:

OU6D. Address Line 4:

+ OU6E. City or FPO/APO (see paragraph A7.1.5.5):

+ OU6F. State or FPO/APO Code (see paragraph A7.1.5.5):

+ OU6G. Zip Code (see paragraph A7.1.5.5):

OU6H. Country:

A7.1.5.6.2. Enter the Fully Qualified Domain Name (full hostname). Separate the username and hostname parts of the mailbox by “@”. Otherwise, follow the syntax required for routing mail to your network. It is mandatory to include either this field or OU6J.

+ OU6I. Network Mailbox:

A7.1.5.6.3. An entry for use by the X.400 MTS to deliver messages. Use an address on either the GOV+DMS+TRANS, or GOV+DMS+TRANS1, or GOV+DMS+TRANS3 PRMDs. Use the following format: [C=Country/ADMD=Administrative Management Domain/PRMD=Private Management Domain/O=Organization/OU=Organizational Units/two levels; OU1, OU2, /S=surname/G=given. An example of a DMS X.400 (no PRMD):

/C=US/ADMD=DMS/O=AL1/S=Allen/G=John/I=E/GG=III/OU1=GUNT1/OU2=SMTA1

OU6J. X.400 O/R Address:

A7.1.5.6.4. This is the name of your “home” host. Enter the full hostname, not the numeric host address.

+ OU6K. Hostname:

A7.1.5.7. Phone Information.

A7.1.5.7.1. Each user must provide at least one phone number. If you have no commercial phone number, provide your DSN phone number. You may list other numbers. Include DSN or Fax numbers.

+ OU7A. Commercial Phone:

OU7B. Commercial Phone Extension:

OU7C. Alternate Phone:

OU7D. Alternate Phone Extension:

OU7E. DSN Phone:

OU7F. DSN Phone Extension:

OU7G. Fax Phone:

A7.1.5.8. Alternate Administrator Information.

A7.1.5.8.1. To register an alternate administrator, follow the instructions given in paragraphs A7.1.5.4 through A7.1.5.7.1. The procedure is identical.

OU8A through OU11G

A7.1.6. Instructions for Submitting Registration Data.

A7.1.6.1. Have your base SRA forward all OU1/OU2 registration data through your MAJCOM SRA and then to the AF RA at "register@ddn.af.mil". You may address questions to the same mailbox or call the AF RA Help Desk at 1-334-416-6102/6112 (DSN: 596) for assistance. OU1/OU2 registrations are processed within 10 working days of receipt if all data is included and there are no problems with the information you have supplied. In the case of an OU1/OU2 value that does not fall under one of the established guidelines stated herein, the AF RA will require the requester to supply additional documentation with their application.

A7.1.6.2. If you do not have access to e-mail facilities, you may submit hard copy applications to the following address:

HQ SSG/SINR

ATTN: Air Force Registration Authority

201 East Moore Drive

Maxwell AFB, Gunter Annex AL 36114-6343

A7.1.6.3. Hard copy registrations require manual input and will delay the process of your request. We strongly discourage hard copy registrations.

A7.1.7. Blank Template. Do not alter this template.

#### ORGANIZATIONAL UNIT INFORMATION

- |   |  |
|---|--|
| + | OU1A. NIC Handle (see paragraphs A7.1.4.2 and A7.1.4.4): |
| + | OU1B. Under which PRMD?:                                 |
|   | OU1C. DMS target date:                                   |
| + | OU1D. Requested OU1:                                     |
|   | OU1E. Comments Line 1:                                   |
|   | OU1F. Comments Line 2:                                   |
|   | OU1G. Comments Line 3:                                   |
|   | OU1H. Comments Line 4:                                   |
|   | OU1I. Comments Line 5:                                   |

#### REQUESTING ORGANIZATION ADDRESS

- |   |   |
|---|---|
| + | OU2A. Organization/Agency Name:                       |
| + | OU2B. Address Line 1:                                 |
|   | OU2C. Address Line 2:                                 |
|   | OU2D. Address Line 3:                                 |
|   | OU2E. Address Line 4:                                 |
| + | OU2F. City or FPO/APO (see paragraph A7.1.4.5):       |
| + | OU2G. State or FPO/APO Code (see paragraph A7.1.4.5): |
| + | OU2H. Zip Code (see paragraph A7.1.4.5):              |
|   | OU2I. Country:  |

## DEACTIVATE OU1 RECORD?

OU3A. Deactivate OU1?..(see paragraph A7.1.4.4)(Y/N):

## POINT OF CONTACT INFORMATION

+ OU4A. NIC Handle (see paragraphs A7.1.4.2 and A7.1.4.3):

## NAME INFORMATION

+ OU5A. Last Name:

+ OU5B. First Name:

OU5C. Middle Name or Initial:

OU5D. Name Suffix:

OU5E. Title/Rank:

## ADDRESS INFORMATION

+	OU6A. Address Line 1:
	OU6B. Address Line 2:
	OU6C. Address Line 3:
	OU6D. Address Line 4:
+	OU6E. City or FPO/APO (see paragraph A7.1.4.5):
+	OU6F. State or FPO/APO Code (see paragraph A7.1.4.5):
+	OU6G. Zip Code (see paragraph A7.1.4.5):
	OU6H. Country:
+	OU6I. Network Mailbox:
	OU6J. X.400 O/R Address:
+	OU6K. Hostname:

## PHONE INFORMATION

+ OU7A. Commercial Phone:

OU7B. Commercial Phone Extension:

OU7C. Alternate Phone:

OU7D. Alternate Phone Extension:

OU7E. DSN Phone:

OU7F. DSN Phone Extension:

OU7G. Fax Phone:

## ALTERNATE POINT OF CONTACT INFORMATION

+ OU8A. NIC Handle (see paragraphs A7.1.4.2 and A7.1.4.3):

## NAME INFORMATION

+ OU9A. Last Name:

+ OU9B. First Name:

OU9C. Middle Name or Initial:

OU9D. Name Suffix:

OU9E. Title/Rank:

## ADDRESS INFORMATION

+	OU10A. Address Line 1:
	OU10B. Address Line 2:
	OU10C. Address Line 3:
	OU10D. Address Line 4:
+	OU10E. City or FPO/APO (see paragraph A7.1.4.5):
+	OU10F. State or FPO/APO Code(see paragraph A7.1.4.5):
+	OU10G. Zip Code (see paragraph A7.1.4.5):
	OU10H. Country:
+	OU10I. Network Mailbox:
	OU10J. X.400 O/R Address:
+	OU10K. Hostname:

## PHONE INFORMATION

+ OU11A. Commercial Phone:

OU11B. Commercial Phone Extension:

OU11C. Alternate Phone:

OU11D. Alternate Phone Extension:

OU11E. DSN Phone:

OU11F. DSN Phone Extension:

OU11G. Fax Phone:

## ADDITIONAL INFORMATION FOR ORIGINATOR/RECIPIENT ADDRESSES

### A8.1. Originator/Recipient Addresses-Additional Information.

A8.1.1. The X.400 O/R address is used by the X.400 MTS to route and deliver messages. The O/R address uniquely identifies the user agent (UA) (or a message store) with which a user is associated. There is no good way to transform an O/R address into an X.500 name or vice versa. Rather, the O/R address is an attribute stored in the DIT entry directory name, normally one for each user. The MTA uses this address to route and to deliver messages. The format of the O/R address is:

A8.1.1.1. Country (C).

A8.1.1.2. ADMD.

A8.1.1.3. Private Management Domain (PRMD).

A8.1.1.4. Organization (O).

A8.1.1.5. Organizational Units (OU) (four levels: OU1, OU2, OU3, and OU4). The X.400 address should only go down to the OU2 level. The OU3 level is for identifying organizational names since organizations do not have surnames and given names. The format for organizational names is the functional address symbol (FAS) code for that organization, including office symbol. This format is still under development.

A8.1.1.6. Surname and Given name.

A8.1.2. The C, ADMD, PRMD, and O are already registered by the DISA registration authority. The discussion of these standardized fields is provided for completeness.

A8.1.3. The C is standardized as "US." The ADMD indicates internal traffic or external public service providers. The DoD will use an ADMD value of "DMS". The PRMDs are named for the appropriate DISN subnetworks. The PRMD names are currently assigned as follows:

A8.1.3.1. GOV+DMS+TRANS distinguishes a non-compliant PRMD on an unclassified DoD network.

A8.1.3.2. GOV+DMS+TRANS1 identifies a non-DMS-Compliant PRMD on a secret network.

A8.1.3.3. GOV+DMS+TRANS3 indicates a non-DMS-Compliant PRMD on a TS/SCI network.

A8.1.4. The Country, ADMD, PRMD, and O are assigned by the DMS DISA. A DoD-compliant system indicates that the components are approved to operate by the DMS approval authorities.

A8.1.5. The O value consists of a two-character state or country code concatenated with a numerical identifier (example =AL2).

A8.1.5.1. The O value does not relate to the MTA name even though the format is the same. Currently, all O value registrations belong to DISA.

A8.1.6. The base SRA will request a change to the OU1 value from their MAJCOM SRA based on the defined format and request approval from the AF RA. The OU1 value consists of a location type name of four characters or less concatenated with a numerical identifier (example: OU1=GUNT1). The identifier field of the OU1 value is used to indicate a base, station, region, or program as determined by the MTA administrators to best satisfy their messaging requirements.

A8.1.7. The SRA that is responsible for the OU1 value is responsible for all the remaining OU fields under the OU1 value. The SRA must maintain adequate records of all OU1 through OU4 used and provide them to the AF RA upon request. Spreadsheet or data base software is used to maintain this information electronically.

A8.1.8. The base SRA must also register OU2 values and below through their MAJCOM SRA with the AF RA. OU2 values are required to support implementation of subordinate MTAs and/or to support delegation of update authority to other organizations or individuals. The OU2 format is "SMTA" followed by a numeric identifier, such as "SMTA1".

A8.1.9. OU3 is used of organizational mail addressing. The full FAS code for organization and office symbol is required, up to 12 characters. If the FAS is longer than 12 characters, is used as well. Subordinate MTA linkages (bilateral agreements) are approved by the AF RA.

A8.1.10. Organization names in X.400 and X.500 are not necessarily related. Organization names and organizational unit names in X.500 names generally identify real organizations. Organization names and organizational unit names in X.400 addresses may contain routing information. For example, an O or OU1 value is linked to a routing MTA.

A8.1.11. The O/R address for individual messages includes the surname and given name fields. An O/R address for an organizational message does not include the surname and given name fields, and instead ends with an OU2-OU4 value.